



# **CWEMF 2023 Awards**

**Career Achievement  
Distinguished Life Membership  
Hugo B. Fischer**

Folsom, California

April 17, 2023

# Hugo B. Fischer Award

In honor of Dr. Fischer's pioneering work on San Francisco Bay-Delta water quality modeling. Conceived and endowed by Lyle Hoag, Retired Executive Director of CUWA and Co-founder of CWEMF. Supported by the Fischer family.

Recognizes pioneering contributions to the use of modeling for understanding or solving California water problems:

- Innovative development, refinement, or application of a computer model
- Significant furtherance of the effective use of models in open forums for planning or regulatory functions

# Hugo B. Fischer

- BS (1958), MS (1963), & PhD (1966) from California Institute of Technology
- Professor of Civil Engineering at U.C. Berkeley until 1983
- World-renowned authority in saltwater intrusion, water pollution, heat dispersion in waterways, and mixing of rivers, lakes, and oceans



# Past Hugo B. Fischer Award Winners

1995: Richard Denton  
& Alan Jassby

1996: Ralph Cheng  
& Greg Gartrell

1997: Francis Chung

1999: Walter Bourez III  
& Jack Rowell

2000: Kamyar Guivetchi  
& Dwight Russell

2001: Armin Munevar

2002: Gerald Orlob

2003: Can Dogrul

2004: Tom Heinzer

2006: Carl Chen  
& Paul Hutton

2007: John DeGeorge

# Past Hugo B. Fischer Award Winners

2008: Richard Howitt  
& Jay Lund

2009: Pete Smith

2011: Russ Brown

2012: Nancy Parker

2013: Nigel Quinn

2014: Dan Easton

2015: Mike Deas

2016: Eli Ateljevich

2017: Rich Juricich

2018: Saqui Najmus  
& Ali Taghavi

2019: Chuck Young  
& Andy Draper

2023...

# 2023 Hugo B. Fischer Award Winner

Dr. Michael MacWilliams



# Dr. Michael MacWilliams

- PhD, Civil & Environmental Engineering, Stanford, 2004
- PE: CA, OR, MD, NC
- MS, Civil & Environmental Engineering, Stanford, 1998
- BS, Engineering & Environmental Science, Notre Dame, 1997
- BA, English, Notre Dame, 1997

## **Professional Highlights:**

- Principal Engineer at Anchor QEA, over 22 years of experience in water resources, hydrodynamic, and environmental analysis.
- Primary developer of unTRIM Bay-Delta 3D Model and has continually improved the model since then.
- Promoted quantitative model evaluation metrics and helped promote model use in numerous federal, state, and local studies.
- Author or co-author of more than 28 publications, Consulting Assistant Professor at Stanford 2004-2013.

# Dr. Michael MacWilliams

*In recognition of your pioneering contributions to three-dimensional modeling of the San Francisco Bay and Sacramento-San Joaquin Delta to increase our understanding of the interactions between flow, the low salinity zone, water operations, and habitat. Your continued work to improve, enhance, and refine the UnTRIM Bay-Delta Model has promoted its application by many federal, state, and local agencies. Your work has included valuable contributions to the Delta Risk Management Strategy, Bay-Delta Conservation Plan, and the Low Salinity Zone Flip Book. Your publications clearly demonstrate the importance of your work in the fields of hydrodynamic modeling, estuary science, and habitat management.*